The Insecticide Dibutylphthalate (DBP) and Intergenerational Birth Defects

**Claimant:** Paora Tutemakohu Tau and David Rarere  
**Representing:** Themselves, their whanau, and their fellow servicemen/women and their whanau.  
**Concerning:** It is alleged that the Crown has breached the principles of the Treaty of Waitangi through various acts, omissions, legislative measures, practices and policies. In particular the claimants allege that the Veterans' Support Act 2014 fails to provide for the claimants' descendants who suffer a higher incidence of medical conditions as result of the claimants' exposure to insecticide Dibutyl Phthalate (DBP). The claimants seek a variety of relief including a recommendation that the Crown fund research into the link between the claimants' exposure to DBP and the medical conditions of their descendants.

There was some confusion at the hearing at Tuahiwi Marae on 4-6 July 2016, about the different insecticides used to protect against the scrub mite and other insects. In my oral evidence I attempted to clarify the matter. To the best of my knowledge in Malaysia and Singapore, under British then New Zealand command and logistics, we used two chemicals:

- Dibutylphthalate (DBP) applied to the seams of clothing; and
- Dimethylphthalate (DMP or DIMP), a commercially available repellent applied to the skin.

There is some evidence that both of those chemicals may have been used in Vietnam. In my time under Australian and US command and logistics we used a repellent for both applications. It was:

- N.N-diethyl-m-toluamide, commonly known as DEET.

Much of the hearing at Tuahiwi Marae 4-6 July 2016 was taken up by evidence concerning this DBP claim. The basis of the claim is a 2012 published paper:

*The New Zealand Medical Journal, July 2012*

“New Zealand Malayan war veterans' exposure to dibutylphthalate is associated with an increased incidence of cryptorchidism, hypospadias and breast cancer in their children” Matthew Carran, Ian C Shaw

The principal claimants are:

Paora Tau [Affidavit](#), 17 April 2015
David Rarere Brief of Evidence, 18 June 2016

One of the main witnesses is the wife of Paora Tau. She is also “an associate member of the Christchurch Memorial RSA, and a committee member of the Christchurch RSA Patriotic Committee and the Secretary for the Canterbury branch of the Malaya Veterans Association”. The Canterbury Branch of the Malaya Veterans Association instigated and assisted in the Carran & Shaw research.

Helene Hakaraia Brief of Evidence, 14 July 2016

The other two main witnesses, Jack Stanaway and Ray King-Turner, are members of the New Zealand Malaya Veterans Association (NZMVA) and who were the main proponents of the theory that “claimants’ descendants who suffer a higher incidence of medical conditions as result of the claimants’ exposure to insecticide Dibutyl Phthalate (DBP)”. Mr Stanaway first approached the National Executive of the Malaya Veterans Association about this issue in 2008. He states in his Brief of Evidence:

“Mr Ray King-Turner, Vice President of the NZMVA, made contact with me. A Working Group was then set up from the Canterbury branch of the NZMVA to canvas and establish a record of incidents of reproductive and developmental disorders suffered by children of Malaya veterans. The Working Group consisted of Mr Ray King-Turner, Mr Paora Tau and myself. Mr Tau has since withdrawn from the Working Group on account of ill-health but he was the contact for the Maori veterans. In July 2009, the Working Group, made an approach to the University of Canterbury, with a telephone conversation with Toxicologist Professor Ian Shaw. Professor Ian Shaw indicated that he was interested and would consider promulgating a research study”.

The evidence of these two main witnesses is at:

Jack Stanaway Brief of Evidence, 5 July 2016
Ray King-Turner Brief of Evidence, 5 July 2016

Witnesses produced in support of the claim were Paora Tau, Muka Mayes, David Rarere, Michael Kau, Mahina Kau, Tahae Roberts, Ian Cootes, Michael Holloway, Ray King-Turner, Peter James Mason, Thomas Piahana, Helene Hakaraia, Jack Stanaway, David Thompson, Bill Broughton, John Wihone, Herbert Timu, Robert Curtis, Ian Cootes.

During my oral evidence on 5 July 2016 I stated (words to the effect) that there were problems with the scientific evidence (Carran & Shaw) produced to validate this claim. I referred to two areas of concern:
• The small self-reported research sample and its doubtful statistical significance; and
• The exposure and dosage model developed by the researchers. I noted that many soldiers did not use DBP and those that did would have used it on an irregular rather than a daily basis.

The same or similar concerns were expressed by Vic Johnson shortly after the above paper was published.

www.premierstrategies.com, 24 August 2012
“Abnormal Health Disorders arising from Military Service in Malaysia 1948 to 1969 Response to New Zealand Study: Dibutylphthalate as a causative of health issues from application as an insecticide in Malaya”.
Victor R Johnson

Two further articles were published in the New Zealand Medical Journal. In both articles the scientific authors questioned the validity of the Carran & Shaw research.

The New Zealand Medical Journal, 7 September 2012
“Comment on Carran and Shaw’s “New Zealand Malayan war veterans’ exposure to dibutylphthalate” article”
David McBride, Leo Schep

The New Zealand Medical Journal, 14 December 2012
“Increases in disease in Malayan war veterans’ children may be misleading”
Mark Elwood, Barry Borman

The dissenting opinions were not produced in evidence. On the basis of the evidence produced at the Waitangi Tribunal, and the dissenting scientific opinions, and in the absence of similar claims from the tens (perhaps hundreds) of thousands of British Commonwealth servicemen and women who served in Malaysia and Singapore when DBP was on issue, there is no research or evidence to substantiate the claim.